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The Proposed Statue in Bowling Green.

THREE or four months ago a gentleman of this city wrote to the Park Commissioners that he had a bronze statue of one of his direct ancestors and of heroic size—it is really six feet two inches high—which he was ready to present to the city, with an appropriate pedestal, and for which he would prepare a proper foundation on the condition that it should be placed in Bowling Green. Very obviously the commissioners should have refused to accept the statue with this proviso. They have been placed in charge of the public grounds of this city and have assumed the responsibility, not only of protecting them from the intrusion of objects which may detract in any way from their value, but to guard them from any change which does not directly add to their value as parks. It is quite as much a question of art to decide upon a site for a statue as to pass upon its intrinsic merit. Any statue which has sufficient artistic value to justify its purchase by the city, or its acceptance by the city as a gift, deserves to be placed where it can be seen to the best advantage. On the other hand, it ought not to be admitted into any of the city's public grounds unless it can be placed so as to add in some way to their beauty or usefulness.

As we remember, the obelisk was accepted with a proviso as to its location by the commissioners, and it was placed where it now stands without any consultation with a paid and responsible landscape architect connected with the department. The President of the Park Board at that time stated that the public-spirited gentleman who brought the monument to this country desired that it should be placed on a knoll in the park, and this individual preference was offered as a sufficient reason for erecting it on its present site. Now, an obelisk is impressive because of its definite contrast between the vertical and the horizontal, and the Egyptians who invented this form of architectural ornament never thought of placing one on an eminence. Indeed, a memorial was signed by many of the leading artists of the city, when it was being moved from the vessel which brought it from Egypt, asking that it should be placed in the plaza at the Fifth Avenue entrance to the park, where it would stand on absolutely level ground, from which it could be viewed at different distances, and where it could be approached from every side, and where its full meaning could be brought out. As it now stands there is nothing to emphasize its rigid uprightness. It loses its austere expression from its connection with the flowing lines of the ground on which it stands. Of course, it is no addition to the beauty of the park. Besides this, many beautiful trees were cut away to make room for it, a stretch of green turf was interrupted, and the top of a beautiful hillock which made in itself a delightful picture was shaved off to make room for a work that was altogether alien to its surroundings. In short, the park itself suffered serious damage, and the obelisk has lost its dignity and impressiveness because it was improperly set.

For many years there has been a committee to pass upon the merits of statues which it was proposed to erect in our public grounds, and we believe that the present commission has transferred this authority of selection to the National Sculpture Society. In this way the parks are now reasonably fortified against a promiscuous invasion of bad statues. But, very plainly, the decision of the question where any statues are to stand must finally rest with the Park Commissioners. One of the reasons for their official existence is the protection of the parks from being desolated by the partisans of special ideas on special occasions. A park board has no right to consider the preference of individuals as against the rights of all the people. Whenever the park board is importuned to admit any alleged work of art, or any building for a special purpose, or to devote a part of its grounds to a specific use, their attitude at such a crisis should invariably be one of conservatism and respectful criticism. There always will be found persons who are willing to celebrate themselves or their ancestors by giving the city a statue, provided they can have it set up in some prominent place. There always will be public-spirited citizens who are carried away by some novelty which they wish to introduce in the parks. But the park board stands against the preferences and demands of individuals and of special classes and for the greatest usefulness to all the people. And when it is considered that the beauty of the parks is their highest use, it is plain that such a point as the location of a statue should be decided by some final court, in whose taste and training and experience and artistic sympathy the people can repose confidence. Commissioners are rarely chosen for their ability to decide questions of art, but, as the settlement of such questions must finally rest with them, their plain duty is to have a permanent and paid officer in such matters to whom they can refer these questions with confidence.

As for the statue of Colonel Abraham De Peyster, which it is proposed to set up in Bowling Green, it may be said that the former advisory committee of the park has pronounced it "a fairly successful work." Colonel De Peyster was Mayor of this city two hundred years ago, but it may be doubted whether he is a figure of sufficient historical importance to justify the devotion of a part of such valuable ground as Bowling Green to his memory, even if the statue in itself were of the highest artistic excellence. Probably not one out of a thousand persons who pass the site of the statue every day has ever heard of his name. Again, this is one of the oldest open spaces in the city, and it stands at the beginning of the city's great thoroughfare. If any consistent scheme for beautifying the city with works of historical or artistic significance is ever adopted it will be a point of singular value. It is even now one of the most interesting spots in the city for its traditions, and its grass and water and trees make an attractive picture even if it had no such associations. The President of the National Sculpture Society has put on record his opinion that no portrait statue should be placed there, but that the ground should be reserved for some more impressive work if it is to serve any other purpose than the one it now so satisfactorily fills. However that may be, it was the plain duty of the Park Board, when the Bowling Green site for the statue was suggested, to refer the matter to their

landscape architect. Mr. Vaux, as one of the designers of Central Park and of other parks of the city, and by his long service in the department, thoroughly understands what a park is and what it is for. He stands primarily for the artistic treatment of the parks. He has made a study of just such questions as these, and he is employed to give advice whenever a problem of this sort is presented to the Board for solution. Nevertheless, the question was not referred to him, but to one of the commissioners, who does not pretend that he has ever had any training or experience that would give value to his opinion on such a point.

When the Park Board which was superseded by the present one attempted to lay out the Harlem speedway without consulting its official adviser the people protested against the act as a violation of the obligations they had assumed. The same considerations which condemned that Board for their action in relation to the speedway apply in the present case. If the commissioners should adopt a design for a new park prepared by one of their number, it would be considered an intolerable assumption of authority, but the placing of an alleged work of art on the city's public ground is quite as much outside of his proper function. There is only one way to defend the parks against vulgar intrusion, and to hold them steadily to their original purpose without any impairment of their value, and that is to defer matters of this sort to some paid and permanent official whose capability is unquestioned, and who is held to the careful performance of his duties by a sense of his professional responsibility.

Rhododendrons in a Natural Wood.

THE illustration on page 255 represents a driveway through a natural wood in Westbrook, the estate of W. Bayard Cutting, Esq., on the shores of Great South Bay, Long Island. Unfortunately, the original photograph lacked sharpness of detail, and, therefore, much of the beauty of the view is lost in the reproduction. It suffices, however, to show how Rhododendrons can be successfully used in connection with the natural undergrowth of woodlands without being so obtrusive, even when in full flower, as to give an effect of artificiality where it is the leading intention to preserve the spirit of native wildness and seclusion. Even when at their height of bloom the deep shadows and abundant foliage above and about them soften the glow of color, so that they seem but little more conspicuous than the Kalmias, Clethras, Viburnums, Thorns, Elders and Wild Roses which flourish and flower abundantly in that region. And it must be remembered that these plants are in flower but a comparatively short time during the year, and as Mr. Cutting remains late in the country, the evergreen foliage of the Rhododendrons is of great value all the year round, and especially in winter.

The successful use of Rhododendrons in the woods is also interesting as a horticultural experiment on the south side of Long Island, where the light, dry soil contains apparently very little plant-food. It was rightly judged that even near the shore these plants would flourish under the shelter of the woods, which would at once defend them from driving winds and from the snow-reflected sunlight in winter, if they could only be supplied with proper soil conditions. In order to secure moisture, advantage was taken of a natural depression in the woods along the bottom and sides of which one of the principal plantations was made. Beds were here excavated to the depth of some two feet, and since peaty soil was not available, loam from the woods was mixed with good barnyard manure and leaf-mold from the surface of the Pine woods. Under this treatment the plants have grown well, and although they have suffered as Rhododendrons did elsewhere during the trying weather of last winter, a fortnight ago they were all showing admirable flowers in fair-sized trusses. Perhaps the plants in the lowest part of the hollow are the largest, but they do not seem more thrifty than those on higher soil, or than the isolated plants which are scattered through the woods to connect the different groups with each other and with the natural underwood. No Kalmias originally grew in this particular woodland, but they abound near by, and Mr. Cutting has successfully transplanted these also from their native woods, and their flowers and evergreen foliage make a harmonious addition to the natural scenery of the place.

At this season the Rhododendrons are probably the most striking feature of the estate, although they are mostly confined to the borders of the drives through the woods. But in its general treatment Westbrook furnishes an interesting illustration of a successful effort to emphasize and develop the natural features of these wooded shorelands. On one side of the house the woods have been thinned out, leaving vigorous young Oaks and other native trees, which are allowed to remain until they interfere with each other, and already what was once a forest is now an expanse of park-like land, which will continue to improve as the trees increase in age and dignity of expression. Some of the Oaks now are fine broad-spreading specimens, and one rarely sees more luxuriant and glossy foliage than they carry. On another side of the house a broad lawn stretches toward the shore, giving a glimpse of sea in the offing. This lawn is set in a natural and irregular wood border, and on one side of it an open group of Pines, with their dusky shadows, gives the final finish to an exquisite picture.

Apart from these large features of the design there are drives through Pine woods and along the water and between masses of foliage almost as dense as a close-set hedge, and secluded paths which lead through the wild-wood it may be to a bridge across some inlet of the bay or it may be to shores which are brightened with the flowers of Irises and many other water-loving plants. The shores and thickets and wood borders are rich in the variety of their native vegetation, and Clethras, Ilexes, Myricas, Viburnums, Dwarf Willows, Cornels, Sassafras, Beach Plum and many other shrubs and low trees give a diversity of form and color and character to the masses of foliage which are a continual delight. Along with these, the Sweetbrier and Rosa rugosa are quite as much in keeping with the scene as the native Roses among which they grew. Clematis paniculata clambers over the shrubbery as contentedly as if it had always been at home there, and the golden flowers of Iris Pseudacorus are quite as much in accord with the natural wildness of the scene as those of our own Blue Flag. In thus adding to the natural richness of the woods, good judgment has been exercised in selecting such plants as are suited to the spirit of the place. It is especially gratifying to observe with what apparent abandon Rosa rugosa gives itself up to this untamed life, and how perfectly its glossy leaves and the careless, unconventional way in which its flowers open adapt it to half-wild situations. Of course, in a large estate like this there are greenhouses and flower gardens to interest any one with horticultural tastes, but its leading attraction, after all, is the appreciative and respectful way in which the native and distinctive features of the place have been treated. These wooded shorelands have a quiet charm of their own which is well worth preserving, and one who apprehends and cherishes the true spirit of the place, and submits himself to its guidance, is in little danger of going wrong in his planning or planting. An intelligent and affectionate regard for what Nature has done for this part of Long Island will save any one who attempts to develop its landscape resources from the mistake of decorating it with elaborate floral embroidery or from importing many strange and incongruous exotics to mingle with the varied, but ever graceful and harmonious, native vegetation.

Many large trees about a house—especially Elms—are an indication of old family distinction and worth. . . . Any evidence of care bestowed on these trees compels the traveler's respect as for a nobler husbandry than the raising of corn and potatoes.—*Thoreau.*

Œnotheras on the Prairies.

THIS genus of beautiful wild flowers is one of the richest and best in its attractive species. During May the blossoms are most numerous, though one species or another can be found in flower at almost any season of the year. Œnothera sinuata and Œ. serrulata especially have a long season of flowering.

Probably the most attractive prairie species is Œnothera speciosa, whose magnificent large white flowers light up the gathering shadows in the ravines as the spring sun goes down. The blossoms are delicate in texture and color, and have a dignified grace of outline, which, expressed in the pure white material of the freshly opened petals, has an effect akin to what we feel in the presence of beautiful and simple statuary. It has the same expression of purity so characteristic of Calla Lilies and Lilium longiflorum, but without the waxy appearance which makes such flowers look so artificial. It is not surprising that this species is a general favorite, in spite of its perishability. The bright sun and a light wind in the morning soon change the petals first to a beautiful rose, then to deeper pink, and soon they wither entirely.

Larger and longer in calyx tube and of more brilliant features is Œnothera Missouriensis. This species has immense yellow flowers, often measuring two and three inches in diameter, with a calyx tube three or four inches long. The petals are a clear, brilliant yellow, and resist the hot sun with some success. The plants are low-growing and coarse, but they take to the most barren and exposed hillsides where their rather gaudy displays are the more welcome.

Œnothera sinuata is quite a weed in some places. Mr. T. O. Munson has recently related* that this species "makes splendid greens, equal in my estimation to Spinach." The blossoms, though individually pretty, are small and sessile on the coarse stem among rough leaves, so that they rank very low in ornamental value. Œ. serrulata is one of the most characteristic of prairie flowers, having a wide range and a long season. It seems to have no preference for hillsides or hollows, but grows at large also on the level areas of grass land, which in many places stretch out for miles unbroken. The different botanical varieties of this species are very interesting.

Œnothera biennis is more of a coarse-looking weed, and is hardly a creditable member of this genus, viewed from a purely artistic point. But other species, less common than those already mentioned, usually agree in enhancing the attractiveness of the prairie flora. Among those more or less frequently collected in this country should be mentioned Œ. Hartwegi, Œ. pinnatifida, Œ. rhombipetala and Œ. linifolia. Others are found in different localities, but do not seem to be so generally distributed.

Oklahoma Agricultural College. *F. A. Waugh.*

Foreign Correspondence.

London Letter.

CRINUM SCHIMPERI.—This is a good plant for the cold greenhouse or frame, or, indeed, any position where severe frost is excluded. It thrives at Kew under treatment which suits the Stenomessons, Ismenes and Belladonna Lily, flowering freely in midsummer. The flowers are tubular, rather narrow, and not unlike those of Crinum Capense or longifolium, but white and fragrant. When grown in a warm greenhouse it flowers in May, but the leaves are somewhat drawn. We are indebted to Herr Max Leichtlin for the possession of this plant. It was first distributed under the name of C. Abyssinicum, and is still known by some cultivators under this name. It is a native of Abyssinia, from whence it was sent by Herr Schimper about twenty years ago. It is one of the few Crinums from Africa which are easily managed under cultivation here. A good figure of this species is published in the last number of the *Botanical Magazine* (t. 7417), where Mr. Baker describes it as a half-hardy species with globose bulbs the size of a man's fist, with an elongated neck; leaves linear, recurving, glabrous glaucous, three feet long, two inches wide at the base, gradually tapering to the point; peduncle stout, terete, two feet long, brownish; perianth tube four inches long, tinged with red, limb funnel-shaped, four inches long, with recurved segments, pure white; stamens white declinate, shorter than the perianth-limb. It belongs to the same group as C. latifolium, C. Zeylanicum and C. longifolium, and closely resembles C. Abyssinicum, which Schimper discovered in the mountains of Abyssinia in 1838, but which has not yet been introduced into cultivation.

STENOMESSON INCARNATUM.—If this plant were only freer in the production of flowers it would become a popular garden bulb. Unfortunately, however, neither it nor any one of the dozen species known can be depended upon to bloom, although they are easily grown in pots in a cold greenhouse or planted out in a sunny frame. Some of them are known in gardens under the generic title of Coburgia, the best form of Stenomesson incarnatum being called Coburgia trichroma. This is now in flower in the Cape-house at Kew, and its umbels of tubular pendent flowers, each three inches long and colored carmine-red and yellow and tipped with grass-green, are very attractive. We flower these plants by preventing them from becoming overcrowded with offsets, which they produce in abundance, but which should be removed when the bulbs are started in February.

HÆMANTHUS KALBREYERI.—Large numbers of the bulbs of this handsome species from tropical Africa have been distributed in England recently, and consequently its brilliant blossoms are not now uncommon in collections of stove-plants. At the Temple Show there were some magnificent heads of flowers shown by Messrs. J. Veitch & Sons, and in the St. Albans nursery they were very numerous about a month ago. At Kew they have been in flower since April, and are not all over yet. When this species was first introduced, now about fifteen years ago, it obtained a bad name with cultivators because it generally failed to bloom a second time. Now, however, that its requirements are understood, it is a favorite with growers of bulbous plants. The treatment essential to its success in the garden is a tropical, moist, sunny house while it is growing, and a dry position on a shelf in an intermediate temperature while it is at rest. I suppose we ought to follow Mr. Baker and call it Hæmanthus multiflora, variety.

CYRTANTHUS HUTTONI.—This is one of three larger-flowered species of Cyrtanthus, the other two being C. obliquus and C. carneus. It is as easily grown as C. Mackenii, which is a weed at Kew, but as yet C. Huttoni is rare, although first flowered here thirty years ago. It has lorate leaves, contemporary with the flowers, a foot long, nearly an inch wide, and in habit suggestive of Agapanthus. The scape is stout, fifteen inches long, bearing an umbel of six flowers which are sub-pendent, nearly two inches long, tubular, with short reflexed segments, and the color pale orange-scarlet. Plants of it have been raised from seeds at Kew, and several of them are now in flower. A figure of it will shortly be published in the *Botanical Magazine*. It is a native of South Africa, in the neighborhood of Grahamstown, where I saw it in flower eight years ago.

EUCHARIS LOWII.—This is nothing more than an erratic form of Eucharis grandiflora (Amazonica), with the three inner segments of the corolla incurved and twisted toward the centre, and, therefore, not quite so satisfactory as a flower as E. grandiflora itself. It is, however, worthy of note that this character is constant in all the many plants that I have seen of E. Lowii.

EURYCLES SYLVESTRIS is a good stove bulbous plant, as it is easily managed, and when bearing its large umbels of white Eucharis-like flowers it is decidedly attractive. Treated exactly as we treat Hippeastrums it is perfectly

* *American Horticulturist*, vol. v., p. 44.

happy, flowering in September. This year, however, some of the bulbs have come into flower in June, possibly because they went to rest earlier than usual last autumn. There can be no doubt of the necessity of a decided period of rest for many tropical bulbs to induce them to flower.

Lilium Henryi.—This fine Lily has not suffered in the slightest from the excessive cold experienced here in February last; on the contrary, it has proved itself to be one of the hardiest of all, neither small bulbs nor large having been injured; whereas the Burmese species, that is, Lilium sulphureum, L. Wallichianum and L. Nepalense, were killed outright by the frost. Any plant which stood the cold of last winter here may be accepted as perfectly hardy, the cold having been so intense that our native Ling and Gorse were in many places killed to the ground. Lilium Henryi is now in splendid health, the stems being a yard high and nearly an inch in diameter. Seedlings raised from seeds ripened in the garden here are now sturdy plants and promise to flower this year. Too much cannot be said in favor of this plant as a distinct, hardy, handsome, easily grown Lily.

London. *W. Watson.*

Plant Notes.

Philadelphus Zeyheri.—Under this name a shrub was sent out several years ago by the Messrs. Parsons, of Flushing, Long Island, which is quite different in appearance from the numerous Mock Oranges in ordinary cultivation. It is just passing out of bloom, being considerably later in flower than the well-known Philadelphus coronarius. P. Zeyheri, or, as it is sometimes called, P. Falconeri, is a vigorous, rather upright, shrub with arching branches, and grows to a height of six or eight feet. The leaves are narrower, rather smaller, and usually more sparse than those of P. coronarius or P. grandiflora. The narrow petals do not open horizontally, so as to make a flat flower, but one rather bell-shaped in general contour, although when looked at directly in front the separate, boat-shaped and pointed petals give it the appearance of a star. The flowers are but slightly fragrant. The branchlets, each of which bears four or five flowers, are arranged closely on the main stem, and when in flower the shrub has a distinct and pleasing appearance. Most of the Mock Oranges are desirable free-flowering shrubs, and as they hybridize easily they assume a variety of forms, which makes a satisfactory classification of them extremely difficult, if not impossible.

Beschorneria yuccoides.—This is a member of a genus of the Amaryllis family, natives of Mexico. Mr. Baker gives five species as well known, and five others as imperfectly known. In his arrangement of the family Beschorneria follows Bravoa, and is followed by Doryanthes, but, horticulturally considered, it is very unlike either. B. yuccoides forms a cluster of blue-green, sharp-pointed leaves about two feet long and an inch and a half wide. The plant has a very Yucca-like appearance, except in color, and is exceedingly ornamental. It will stand a temperature of fifteen or twenty degrees, Fahrenheit, for a time without injury, or, perhaps, even less; but that is as low as it has been tested here. Mr. Baker, in his *Amaryllideæ*, gives two instances of its flowering in cultivation—once with Mr. Wilson Saunders, at Reigate, in 1860, and once at Kew in 1875. We can assume, therefore, that its flowering is a rare occurrence, and it is gratifying to learn that this spring one of two plants, raised from seed planted about ten years ago, has been flowered by Mr. W. E. Endicott, of Canton, Massachusetts. Mr. Endicott writes that its inflorescence is not of a showy character, but, like that of the nearly allied Agaves, is very interesting. The flower-stalk was of a beautiful bright pink from base to summit, and it attained a height of four feet. It came from the centre of the plant, and was set with bright pink bracts three inches long, placed about four inches apart; it made an abrupt, though not very divergent, angle at each bract. The buds appeared from all but the four lower bracts, emerging in pairs, and were bright yellow at first. They rapidly assumed a paler tint, and when open were of a faint greenish white. The entire length of each flower was two and a half inches. Mr. Endicott considers the plant valuable for its foliage rather than for its flowers. This species has been figured in the *Botanical Magazine*, t. 5203.

Iris Nepalensis, var. Letha.—The Nepaul Iris is an interesting one, being distinct in that at the resting period the plant is reduced to a mere bud, protected by the fibrous remains of the sheath, and furnished with thin, fleshy, persistent roots. Professor Forster, in *Bulbous Irises*, thinks it nearly related to the Juno Irises, though it is classed by Baker in the subgenus Evansea. I. Nepalensis is supposed to be not hardy, and Mr. Gerard, after cultivating it several years in rich moist soil and drying off the bulbs in winter, has failed to flower it, so that it justifies its reputation as a shy bloomer. While enthusiastic gardeners usually have the patience to work at plants which offer difficult problems, it is fortunate that in the variety Letha, which comes from Upper Burma, we have a plant hardier and more apt to flower than the type. The plants have not been tested here for hardiness, but it flowered with Mr. Gerard last week before the narrow leaves have made more than a few inches of growth. The flowers are very beautiful, of a light lavender shade, with the faintest reddish flush and a yellowish ridge. More exactly, the color is a dense lining on a white ground. The flower, delicately perfumed, is of fine form, the standards spreading, and the crests rather abnormally developed. The flowers are very fugacious, opening late in the morning and lasting scarcely six hours. The plants flower at a height of about six inches. The habit is different from that of the typical species, which has longer leaves.

Dictamnus albus (Fraxinella).—This plant, the common name of which is Dittany or Fraxinella, has been in cultivation since 1596. It is a native of eastern Europe and Asia and belongs to the Rue family, Rutaceæ. It is a hardy herbaceous plant, some eighteen inches or more in height, with dark green pinnate foliage and strongly aromatic. The flowers appear in large terminal spikes in early June; in the type they are white, but a variety with pale purple flowers is more common. The plant is vigorous and easily grown; it succeeds in almost any good soil, preferring a well-drained and sunny situation. The propagation is by division or by seeds; the latter should be sowed as soon as gathered. This plant is not only desirable for the beauty of its flowers and foliage, but the peculiarity which gives it the common name of Gas Plant adds much interest to its cultivation. If a lighted match is applied to the flower-spike when the plant is in full bloom a flame will be produced sometimes eight or ten inches in length; this experiment succeeds best at the close of the day and in calm weather. This phenomenon is due to the inflammability of a very volatile oil secreted by numerous glands on the flowers and flower-stalks. Although much more marked at the culmination of the inflorescence, it is quite possible to obtain the flame at any time after the flower-buds are well developed until the fruit begins to ripen.

Papaver involucratum maximum.—This is one of the best of the perennial Poppies, and superior in many respects to the well-known Papaver orientale and P. bracteatum. Although it evidently belongs to this section of the genus, it does not appear to be described by the common authorities on garden plants. It is probably a true species, as there is no difficulty in obtaining the plants from seeds, which are easily procured and are offered by many of the German dealers. This plant is remarkable, not only for its large flower, but also for its deep color, which is rather a crimson than a scarlet. It has the big black blotch at the base of the petals, and, in general, its foliage, habits of growth, etc., resemble the Oriental Poppies, but the leaves are, perhaps, a trifle darker and less hairy; the flower-stalks are less numerous, much taller and stiffer. It is very difficult

to distinguish them from the better-known species when out of bloom. It is highly probable that this is the plant known as Parkman's Poppy, but there is much confusion now as to the identity of this last-named plant, since some dealers send any good form of P. orientale or P. bracteatum, and others the plant which is now described. Any good soil and sunny position suits it; it should be grown with sufficient room to permit the introduction of other plants; otherwise, after the tops die down, an unsightly bare spot will be left in the border; Kniphofias, or Japanese Anemones make an admirable succession. This and all other Oriental Poppies are easily propagated by root-cuttings, which may be made at any time during the autumn and kept in a cool greenhouse during the winter; by May they should be established in three-inch pots, and if planted out then will make blooming specimens the following year. Any varieties differing from the type can thus be propagated with certainty.

PAPAVER FUGAX.—This is another good Poppy which is not often grown in gardens. This plant is distinguished by soft glaucous green foliage, a tuft of radical leaves, spreading a foot in diameter, from which springs the flower-stalk two feet or more high. The flowers are a pale orange-red, very numerous, but lasting only a day, whence the name Fugax; they are of no use for cutting, but the combination of flower and foliage in the herbaceous border is most effective. The plant is perfectly hardy and is a biennial; when once introduced into a garden it is likely to persist from self-sown seeds.

Cultural Department.

Notes about Annuals.

WE raise most of our annuals in frames and begin to transplant them into their permanent places in the beds and borders about the 20th of May, when danger of frost is past. When thus treated they bloom earlier and their flowers continue for a longer time. Nearly all the annuals raised for garden decorations can, however, be grown from seeds sown in the beds and borders in early summer. After the seeds have germinated and the small, tender seedlings are large enough to handle they should be well thinned out, giving enough room to each plant to make a well-developed specimen. Another important point to be attended to in the cultivation of annuals is the staking of the larger growing ones.

Fig. 37.—Rhododendrons in a Natural Wood, at Westbrook, Long Island.—See page 252.

Many annuals have not large strong roots and are unable to stand a storm of wind and rain, and if once blown down they are never so satisfactory afterward. If a little care and attention are given to this class of plants they are as useful and give as much pleasure as any plants. Many of the annuals in our garden are grown for scientific purposes, and are not showy and attractive. Nevertheless, we have a large number of showy ones, and those mentioned in these notes are worthy of a place in any garden.

Omphalodes linifolia is an annual plant that has been grown in European gardens for nearly a century and a half, but is seldom seen in this country. A few plants massed together are very effective with their light airy flower-stems and white flowers resembling forget-me-nots. The plants are about one foot high, and the whitish flowers are in loose racemes which last a long time.

Another useful annual is Acroclinium roseum, a south-west

Australian plant, introduced into England in 1854. It is a slender, gracefully branched plant, and its rose-colored flowers are borne singly on the ends of the slender branches. The flowers are "everlasting." There is also a white-flowered variety in bloom now. It is like the type in habit and size, but its flowers are white. Acrocliniums grow well in a rich loamy soil, with plenty of sunlight.

Downingia pulchella is a pretty dwarf native plant. It is about six inches high and has showy rich blue Lobelia-like flowers. Its dwarf compact habit, with its freeness in flowering, makes it a useful plant, and it is used for edging beds where larger plants are grown. We are told that it grows on wet banks in California, and is also found in the borders of north Nevada and Oregon. We grow it here in an open position and in a light rich soil, and it gives good satisfaction. This plant is also known in gardens under the generic name Centonia. There are several varieties of this Downingia in cultivation, the only difference being in the color of the flowers. The two best sorts are Atropurpurea, which has slightly larger flowers than the type and of a dark purple color, and Alba, a form with white flowers.

Asperula orientalis is a showy annual, well worth growing. It is a foot high and has beautiful sky-blue flowers, produced plentifully in terminal heads, and they are useful for cutting. Its leaves are lanceolate and in whorls on the stems. In a slightly shaded position and a light open soil it produces its flowers for several weeks. This plant is found in gardens sometimes under the name Asperula azurea setosa.

Pentachæta aurea is a charming dwarf Californian annual about six inches high. Its stems are well clothed with filiform, linear, alternate leaves, and they are diffusely branched. Its flower-heads are very showy, of a bright golden color, and abundant. The flowers are about one inch in diameter and of an exceptionally bright yellow color, which makes them attractive at this time. P. aurea thrives in a light soil, and the flowers have a brighter color when the plants have sunshine all day.

Another pleasing Californian plant in bloom now is Lasthenia glabrata. It has slightly pubescent branched stems with linear leaves. The yellow flower-heads, which terminate the stems, are an inch in diameter, and are produced in large numbers, so that the plant is showy and attractive. It is found in a wild state in moist grounds in west California.

Perhaps no annual in the garden is so much admired at this time as Mesembryanthemum pomeridianum. The plants are about eight inches high, and they have stout hairy branched stems with broad, lanceolate, flat, smooth leaves. The flowers are about two inches across and of a light yellow color; they are showy, and are produced singly on long hairy peduncles. If seeds are sown in March in the greenhouse and the plants grown along they will flower almost as soon as they are planted out in the garden in May. A sunny position and light soil are necessary.

A bed of the native Collinsia verna, two feet wide by four feet long, is now making a beautiful display. This is an erect slightly branched plant with lanceolate leaves, and grows about eight inches high. The flowers are in whorls and are on long pedicels. The lower lip of the flower is of a bright blue, and the upper petal is white. This pretty annual requires a cool shady position and a rather moist soil.

Harvard Botanic Garden. *Robert Cameron.*

The Rock-garden.

THE feature of the rock-garden in May is its masses of bright color, supplied by pink and white Moss Pinks, ultramarine blue Mertensias, the clear white of Arabis albida, and the golden Alyssum saxatile in variety. In June the garden undergoes an entire transformation, and we have a miscellaneous variety of plants. In fact, the whole charm of the rock-garden lies not so much in its masses of color, arranged for effect, as in an interesting variety of plants, many of which have some charm or association which we cherish. How important it is that the care of these plants should be in the hands of some one specially interested in them was impressed upon me recently when a mass of seedlings of Aster Tartaricus came near being weeded out. This beautiful species, with large lavender-blue flowers, blooms in late summer. It is one of the plants of moderate growth, not exceeding two feet high, which we need to break the monotonous effect where the collection is made up almost wholly of low-growing plants. Its color, too, contrasts charmingly with the later-flowering Iceland Poppies, which are mostly of yellow and orange shades. Again, it is important to weed out many plants which, by their abundant reproductiveness, would soon overrun many of the lesser, and often choicer, kinds. Œnothera riparia will grow almost anywhere. While not especially showy, it is yet a neat little species, and useful to leave where others grow less freely, but it sows itself so easily that it is sometimes a temptation to do away with it altogether. Campanula Carpatica, one of our best dwarf Bellflowers, is abundant all over the garden in many forms, including the distinctly beautiful C. turbinata. These dwarf Bellflowers are so charming as seen among the notches and crevices of the rocks that it is not easy to have too many of them. But they persistently and insidiously grow up from the seedling stage, encroaching upon the territory belonging to other plants, and even threaten our paths. They are not alone in this respect. Many of our choicest plants, seeding themselves, have found a safe retreat during winter among the mossy undergrowths in the gravel paths. Here, while all our old plants of the beautiful Primula rosea, from the Himalayas, the most delightful of our early Primroses, were killed outright, self-sown seedlings from last year, which scarcely made growth enough to be visible, broke away with a fine growth this spring; otherwise we should have lost them entirely.

That the large Oriental Poppies are fit subjects for the rock-garden some will not be willing to admit. Perhaps in a small garden in limited grounds they might appear glaring and somewhat coarse in growth, but in a large garden, where trees, shrubs, grassy slopes and water all enter into the landscape, they are quite appropriate. Of these we have several fine varieties, varying from the deepest crimson through orange shades to almost pink. So, too, in a large garden such shrubs as the Japanese Photinia villosa, a near ally of the American Shad-bush, the low-growing Hypericum Buckleyi, the dwarf Evonymus Americanus, Spiræa bullata, Fothergilla Gardeni (a handsome little bush with heads of white flowers in early spring), Leucothoë Catesbæi, Anemone Japonica and A. floribunda, the dwarf Rhododendrons, R. Wilsoni and R. ferruginea, now in bloom, are all effective, not to mention Kalmias and a host of other flowering shrubs and evergreens which could be used in an extensive arrangement of this kind. Some of our handsomest native and also foreign single Roses are most appropriate here. Rosa rugosa has been in bloom for a month past, and apart from the effectiveness of its abundant large violet and white flowers in summer, and its large orange-red hips in autumn and winter, it always exhales a pleasant odor. Then we have the Dawson Rose, a hybrid of the Multiflora and Jacqueminot types; the Persian Yellow, the Burnet, the Sweetbrier, and still several others of shrubby character, as well as the trailing Rosa Wichuraiana, of more recent introduction from Japan. Clematis tubulosa, deep blue, and C. Davidiana, lighter blue and fragrant, are rambling subshrubs which are useful in giving character.

Phlox stellaris, light blue, a chance seedling of deeper blue, and a few scattered flowers of the rose-colored P. amœna are all that remain in bloom of the low-growing Moss Pinks allied to P. subulata. P. Carolina is just opening. It came to us a few years ago among a lot of Silene Virginica, collected in its native habitat. This latter is a most attractive little gem; the color of its flowers being the most brilliant crimson. It sows itself freely, but mostly in shaded spots. This really is the only way we can keep it, as transplanted plants soon die out. The typical Aquilegia Canadensis is out of bloom. We weed out those which have been encroaching on other plants, being sure of enough seedlings to keep up a good display. This beautiful Columbine deserves more extended cultivation. It is one of our earliest plants to bloom, coming into flower with the Wood Lilies, Hepaticas and Dog's-tooth Violets, and before the Moss Pinks, Rock Cress and the mass of other spring flowers. Some hybrids with Aquilegia cœrulea are nearly as bright in orange and red shades, and these with A. glandulosa, A. Skinneri, A. Olympica and A. chrysantha, scattered through the whole garden, serve to make a most attractive picture. Ajuga alpina, A. reptans and a white-flowered form of the latter are all neat-growing kinds, with verticillate spikes of blue and white flowers. Œnothera Missouriensis just now shows a few of its magnificent sulphur-yellow fragrant blooms. This is the best of all the evening Primroses, and is a day bloomer as well. The Cranesbills are among our best rock-garden plants. Geranium pratense, in blue and white varieties, is pleasing in foliage as well as in flowers. G. phæum, of deep purple color, is also good. G. sanguineum is the dwarfest and most continuous bloomer, lasting from now until frost. Potentilla tridentata makes an excellent plant for crevices. Its white star-shaped flowers are pretty and continue for a long time. Erodium Manescavi, the Giant Heron, usually considered tender, has stood the severe test of last winter, and is again in bloom,

also E. macradenum, an elegant little species with finely divided foliage and small striped flowers, resembling in form and markings a miniature Fancy Pelargonium. Raymondya Pyrenaica, with curious flat leaves hugging the rocks closely on the shady sides, is now well established. The small rotate flowers of soft velvety blue are borne on pendent scapes, scarcely three inches high. Saponaria ocymoides is getting quite weedy, but is still so charming that we shall have a few patches of it. Phyteuma Charmelli is a showy and interesting member of the Bellwort family, with heads of bright blue flowers. It has proved thoroughly hardy, and, like the Scotch Bluebells, Campanula rotundifolia, is sowing itself in various parts of the garden. Heuchera sanguinea is not so fine this year, and examination shows it to be attacked with a root-gall. The lesson we learn from this is to get some seed and establish it in new soil. Dianthus arenarius, the Sand Pink, is now plentiful, and evidently has been hybridized to some extent with the Cyclops, as various shades of pink appear. D. cuneatus, the Maiden's Pink, is abundant, too, so much so that we have to weed it out in places. Campanula fragilis, with little upright bells of light blue, holds its own well. Various interesting annuals help to fill up a few unavoidable gaps. Among these, Calceolaria scabiosicefolia has proved thoroughly hardy, coming up every season. Layia elegans is pretty, having straw-yellow Aster-like flowers. Clintonia borealis is a pretty little plant resembling a Lobelia very much.

Wellesley, Mass. *T. D. Hatfield.*

Strawberry Culture.

WE are now in the midst of the Strawberry season, and as our preparation for next year's supply begins as soon as we have gathered the last berries, a few notes on the method adopted are in season. Some five years ago we made an experimental plantation to ascertain which were the most suitable kinds for our soil and climate. About twenty-five sorts were planted for this purpose, only two of which are now grown here, one being Michel's Early and the other the Gandy. Of the remainder there were doubtless many that would be satisfactory in some sections, but they were a failure here; some were winter-killed, some failed to go through the summer, while others were of poor quality for home use, where quality is the first consideration.

In garden-culture, where the space is often limited, it is essential to get the most out of the ground, and have none idle if possible. As Strawberries take up a good deal of space, we prepare a plot of ground well in spring. On this we plant early Peas, Spinach, Lettuce and the first sowing of Dwarf Beans, and any other crops that may be taken off before the beginning of August, and this tract is then used for the new Strawberry plantation. We find that it is useless to attempt to take more than two crops off the same bed; by the third year few of the original plants would be left, as many die each year from the grubs at the roots. After the second crop is gathered the plants are hoed off, and when dry enough are burned with the mulching under them right on the ground, and this is then prepared for the fall planting of Cabbage and Cauliflowers. Under this system we have no idle ground to keep clean, and the most is made out of the limited space at disposal. The runners for this year's planting will be taken from the bed planted last year, as there is more space between the rows wherein to plunge the pots. A trowelful of soil is dug up and placed in a three-inch pot, the pot being plunged in the hole made. The runner is then pressed into the pot, and in about two weeks will be fit to take off and plant in the new bed. We have to water a few times during this period if the weather is dry, but as the pots are sunk their depth in the ground the roots are kept cool and moist with little watering.

We adopt what is known as the hill system in planting, making the rows three feet apart and the plants two feet from each other in the rows, and the quantity produced in this way is surprising. The year-old bed produces fully two-thirds of a crop while the older one is at its maximum capacity. We have never kept a record of the quantity gathered, but hope to do so this season.

The soil we have to deal with is very shallow, with a gravel subsoil, making it difficult to keep the plants moist in summer, but we have never had them heave from frost in winter. A good soaking is given just as the first fruits begin to color, and this will carry them through even if we have no rain until all is gathered, when the beds are cleaned and watered well. Plenty of manure is used when preparing the soil for a crop that has to stand two years on the ground. In addition we apply a sprinkling of some good commercial fertilizer near the plants in the early summer before the lawn clippings are placed about them as a mulch.

From experience it seems best to cultivate only a few varieties. There is less liability to get the sorts mixed, and only a good early, a second early and late variety are needed to cover the season. Michel's Early is the best we have found for first berries, although it rarely escapes the late frosts that were so destructive this year. We have the Leader on trial as a possible substitute for it, hoping to gain size. The Parker Earle comes next, and with us is the most satisfactory of the middle-season kinds. It is not overlarge, of good color and flavor, and has the merit of separating most easily from the stem, leaving the berry in good shape, a quality highly appreciated in the kitchen. Were we restricted to one sort we should select Parker Earle. For a late main crop there seems to be nothing to equal the Gandy. It is always in its best gathering about July 4th; the size is very large, as large as any I have ever seen, not excepting the Marshall, and there is a solidity to the fruit that prevents crushing when it is being stemmed. This is the most robust in constitution of any, and the flowers are rarely injured by frost, owing to the large growth of heavy foliage. We have the Marshall on trial, and this year will prove its merits. It will thus be seen that we depend on three sorts wholly, new ones being well tested before they are planted to supersede them. No garden, however small, should be without at least three sorts, not necessarily those named, but some that suit the locality and the conditions that obtain there.

South Lancaster, Mass. *E. O. Orpet.*

The Vegetable Garden.

Peas.—The early plantings of Peas have done remarkably well this year, the cool, showery weather in May promoting a stocky growth, and the yield has been better than it has for several years. The very earliest lots have now almost done bearing and will be cleared to make room for late Celery or Sweet Corn. Successional sowings of such varieties as Champion of England, Telephone, Yorkshire Hero and Stratagem, we have mulched with meadow grass, and during such hot droughty weather as we are now experiencing we allow the sprinkler to run among them every four or five days; it is best to let the sprinkler run at least an hour at each place to soak the ground thoroughly. Peas naturally prefer a rather cool and moist climate, and to have full pods after midsummer we find artificial watering absolutely necessary. Late sowings may still be made of such sorts as McLean's Advancer and American Wonder, and if water can be supplied these will yield a fairly good crop late in the season, but it is useless to plant them on dry ground.

Celery.—The early crop planted outdoors about the end of May should now be growing nicely. To have good Celery, water, and plenty of it, must be supplied. If allowed to become dry at the root the plants are liable to run to seed when the first heavy rains occur. In watering, the plants should have a thorough soaking, and during dry weather, such as we are liable to have during June and July, twice a week is not too often to apply water. As the plants begin to grow more freely assist them by giving a little liquid stimulant at each watering. We find spent mushroom-manure very useful for mulching the plants, but any other fine manure or short lawn grass is helpful. We usually plant our late Celery on ground vacated by early Peas, and we set the plants in double rows in the trenches. The trenches should be liberally supplied with well-rotted manure, and from start to finish the sprinkler or watering-pot should be kept going. Good Celery can only be had by unceasing attention to several details, of which feeding and watering are the chief. We find that Celery keeps very much better in the open ground than when lifted and stored in pits, cellars or outhouses, provided that water will not stand on the land where it is grown. All that is necessary in winter is to earth it well overhead with soil and protect with manure, dry leaves and boards. The finest Celery I have seen for many years in February was kept this way in a private place. Those who have given this system a fair trial have no desire to return to storing methods in general use.

Tomatoes.—Plants under glass, whether in pots or benches, will now need liberal applications of water and stimulants. We usually have plenty of outdoor fruit ripe by July 1st, and then throw out our indoor plants. Fruit grown under glass is so much superior in color, finish and flavor, and commands so much higher prices in the market, that some growers in the vicinity of Boston now grow them under glass the whole summer. Plants on trellisings outdoors will require tying and trimming weekly. From plants set out from six-inch pots we gathered our first dish on June 12th this year, the variety being Ham Green Favorite. So much finer and earlier fruit can

be obtained by training the plants that it is not surprising to see it more generally adopted each year. About July 10th is a suitable time to make a sowing for a winter crop. Nicholson's Hybrid, Chemin, Eclipse (a splendid English sort) and May's Favorite are all excellent forcers, the first-named being the earliest. For general crops, both under glass and outdoors, we consider May's Favorite the finest variety up to date.

Miscel'laneous.—Sweet Corn here can be sown until July 10th, unless very early frost occurs. For late sowings we use Crosby Early Sugar or some other early kind. Successional sowings of String Beans can be made at intervals of a fortnight until the end of July. We find Mohawk and Valentine the best. Pole Beans may need tying up a little occasionally until they catch well hold of the poles. Beets for winter use can be sown until the middle of July, Egyptian Turnip being one of the best. Among the long kinds, Dell's Black and Goldie's Exhibition we find are very good. Cucumbers of the English frame varieties require liberal supplies of liquid-manure. Sowings outdoors of White Spine can still be made. Parsley, to produce good plants to lift for winter use, is best thinned out a foot apart in the rows. The foliage is vastly improved by this thinning. Cabbage, Curled Kale, Brussels Sprouts and Cauliflower should be planted out during showery weather. Sowings of Cauliflower and Kale are still seasonable. Lettuces are difficult to grow satisfactorily at this season of the year. Plenty of water and partial shade are essentials to the production of good heads; when headed up, cut the stem half through with a sharp knife; this checks the tendency to run to seed. Leeks can be planted out in trenches and treated like Celery. Set the plants deeply in the ground that the neck may be covered and blanched. Ruta Bagas for winter use are best sown on light sandy ground; heavy wormy ground is ill adapted to their culture. If good Onions are desired supply water freely during dry weather, or the bulbs will ripen prematurely. The hoe or cultivator must be in constant use to keep the ground stirred and weeds in check, and all crops as they are spent ought to be cleared away to the rubblish pile.

Taunton, Mass. *W. N. Craig.*

Correspondence.

New Fields in California Fruit-growing.

To the Editor of Garden and Forest:

Sir,—The chances for pioneering in California fruits are not entirely in the past. What has been true of the lemon, olive and orange is true to-day of the pomelo, pineapple, the fig, and possibly other popular and expensive fruits, all of which can be readily marketed if they can be grown of good quality.

The pomelo is still regarded in California as an uncertainty, dependent for its popularity upon a fad that may not last. The sudden growth of the fruit in favor found California unprepared to take advantage of the unexpected demand. The shaddock, a larger and coarser fruit, was grown to a very limited extent and as a curiosity. Its quality was poor, the fruit being thick of rind, full of "rag" and deficient in flavor. Since it was discovered that pomelos sell readily in eastern cities improvements have been made. The bud of the Shaddock has been grafted upon Orange-roots, and the result is a tree which produces the nearly spherical pomelo, which is far superior to the huge, coarse, pear-shaped shaddock. This nomenclature is the popular, if not the scientific, method of distinguishing these fruits. Some quite extensive orchards of the improved variety have been planted in Southern California, and, with the rapid growth that all such fruits make, the growers will soon know whether they are to reap large rewards in advance of probable competition. [As grown in Florida the pomelo and the shaddock are quite distinct.—Ed.]

The pineapple has been successfully grown in some sheltered nooks of San Diego County. The fruit has been marketed at high prices and the growers are confident of success with it. They claim that it is of superior quality. It would seem that so high-priced a fruit would repay unusual care, even to the extent of growing it under glass, if necessary. The markets of the Pacific coast cities have never been overburdened with pineapples, and it is not probable that the limited area adapted to them will produce enough, even for local consumption, for many years to come.

As a commercial factor the fig has been of little importance among California fruits, although it has been an incumbent of almost every rancher's door-yard since the padres taught their Indian peons horticulture. As a fresh fruit it is luscious, and invaluable for its medicinal qualities. Eaten with sugar and cream it is as grateful for dessert as the strawberry and more wholesome. But as it is good only when perfectly ripe it will not bear transportation under existing conditions, and the fresh figs offered in eastern markets are a delusion and a snare. As a dried fruit it has also been a failure in the market.

Quantities of dried figs are sold in California, although they are usually small and shriveled in appearance and lack the rich, aromatic, nutty flavor of the imported fig. The latter commands in California, as everywhere, a high price, usually twenty-five cents a pound. The home product sells for ten cents. It has been the dream of fig culturists for years so to improve the quality that the California fruit may compete with the imported. To this end soils, climates and varieties have been patiently studied.

The nearest approach to success that I have seen is the product of an orchard grown on very deep, sandy loam, in an interior county, where the heat of summer usually hovers between eighty and one hundred and ten degrees. Moisture is fatal to the successful curing of the fig. Even an adjacent field of alfalfa, with its necessary frequent and copious irrigations, has been found to cause sufficient moisture in the air to turn the fruit sour upon the tree before it could be picked and cured. The Fig-tree is almost a continuous bearer during the producing season, and figs in all stages of development grow upon the same tree. Under the conditions above mentioned only a day or two suffices to spoil the successive relays of fully ripened fruit.

The soil above referred to permits of very exact and careful irrigation in whatever quantity it may be desired, the less the better. After irrigation it is easily cultivated. It does not bake, and a careful pulverizing of the surface keeps the moisture suspended by capillary attraction in the deep porous silt, where the roots of the tree find it, and at the same time it gives a gleaming surface that reflects the full vigor of the sun. As I rode on horseback through a three-year-old orchard grown on this soil the branches were above my head, and had a spread of twelve feet at the top. The largest of the trees were seven inches in diameter a foot above the roots, and, standing without a symptom of scale or any disease, seemed personifications of thrift. The branches were crowded with growing fruit.

The product of this orchard has so far been sold at fifteen cents a pound, dried, to the wholesale grocers of Los Angeles. Packed in fancy boxes, the figs resemble the imported article, with a thin transparent skin and a greater development of sugar than is common in the California fig. The variety is the White Adriatic, which is very large, and has the excellent quality of drying upon the tree instead of falling to the ground when ripe.

The subject of caprification has been carefully studied by California fig-growers in the hope that herein may be a solution of the question of quality. But the growers of the Mediterranean are said to be jealous of possible competition, even in so distant a country as California. Consequently frequent attempts to secure colonies of the "fig wasp" for exportation have been thwarted. This is the insect which thrives upon the wild or Capre Fig, and at a certain stage of its fruition enters the domestic fig and deposits the Capre Fig pollen which perfects the fruit. It has long been supposed that this strange operation makes the Smyrna fig so superior in flavor, and, consequently, so much higher-priced than the common fig of California.

Within the last sixty days Mr. George Roeding, a fig grower of Fresno, California, has succeeded in importing from Smyrna thousands of colonies of the fig wasp. Of this importation, Alexander Craw, entomologist for the State Horticultural Commission, says: "I have examined the insects, and find that they are successfully passing from the larvæ into the chrysalis stage. The importance of Mr. Roeding's enterprise to Fig-culture cannot be overestimated. The result of it will be that the California fig will be equal, if not superior, to the fig of Smyrna." Some sixty varieties, including the wild or Capre Fig, and an importation from Aiden, Smyrna, are being tested in the state experimental stations.

There are still other uses to which the fig may profitably be put. It is well adapted to crystallizing. But in this process there are trade secrets not yet understood here. Consequently the French crystallized fruit sells readily at fifty cents a pound, while the California article goes begging at half that price. Delicious marmalades, preserves and sweet pickles may be made from the fresh, fully ripened fig. These are especially fine when given a home-made flavor. The process of picking and either drying or preserving this fruit requires great care, skill and delicacy in handling. It should seem, therefore, that women, if possessed of health, courage and perseverance, might make a success of this industry. The tree is hardy and is not usually afflicted with scale or other pests. Only a moderate capital would be required for an orchard, and the market is a wide one. There is much less risk than in growing oranges or olives. The greatest uncertainty would

be in the cost of the finished product, which might make it too high-priced. But with the constantly increasing demand for delicacies of this sort there ought to be a satisfactory market for meritorious goods.

Redlands, Calif. *William M. Tisdale.*

Meetings of Societies.

Convention of Nurserymen at Indianapolis.

THE twentieth annual convention of the American Nurserymen's Association was held at Indianapolis on the 12th and 13th of June. About 150 members were present, a larger attendance than was expected, as there are few nursery firms in Indiana. But Indianapolis proved to be a good gathering-place, and although the central Mississippi states were most fully represented, there was a good attendance from the east and south.

In welcoming the nurserymen to Indiana, Governor Matthews urged the importance of reforesting various parts of the state, and called attention to his advice upon the subject in his last message to the Legislature. Professor F. M. Webster, of the Ohio Experiment Station, read a vigorous paper upon the San José scale in the east, in which he gave a history of its introduction here and a brief account of its habits. The greater part of the paper, however, was a discussion of the necessity of greater care in the dissemination of nursery stock, and the need of stringent laws for the suppression of such pests in the future. He boldly criticised the action of certain nurserymen, whose names he mentioned, for their neglect to take radical measures to stamp out the scale on their grounds. The association endorsed this criticism by a formal vote of approval. Professor Bailey, being called upon, said that he, himself, had little fear of the scale, for he had observed that insects do little harm if they are dead, and we have a ready means of killing this pest with a strong wash of whale-oil soap. Neither was he in favor of laws for the suppression of insects of this kind or of the general types of fungous diseases. It would be next to impossible to frame practicable laws that would be effective; and inasmuch as the enforcement of such laws rests almost wholly upon public knowledge and sentiment, he would prefer to trust to the diffusion of knowledge than to the enactment of law.

The Japanese Plums were warmly commended by W. F. Heikes, of Alabama, who found them to be hardy and productive. He seemed to prefer Abundance and Burbank, but thought well of Willard, Yellow Japan, Normand and Kerr. R. C. Berckmans, Georgia, spoke in the highest praise of these Plums, as a class, for the south, and also said that they are receiving commendatory reports of them from customers in south Africa. Other persons, from Illinois and other parts of the Mississippi valley, reported that these Plums bloom too early and lack hardiness. It was evident from the discussion that the varieties and nomenclature of these fruits were not well understood.

A thoughtful paper upon "The Testing and Introduction of New Varieties of Fruits" was presented by C. L. Watrous, of Des Moines, Iowa, in which it was urged that greater attention be given to the adaptabilities of varieties to particular geographical regions, and that the indiscriminate introduction of novelties should be curtailed. Every distinct life zone or geographical area has needs which can, undoubtedly, be best met by varieties which originate in that area. Mr. Watrous does not believe that varieties can be thoroughly tested before they are introduced, because to test them in all places is virtually to introduce them. The remedy for the present flood of unsatisfactory varieties is more thoughtful care, on the part of introducers, respecting the varied needs of the different parts of our great country.

Professor L. H. Bailey, in speaking of "Reflective Impressions of the Nursery Industry," said that the staple varieties of the nurseries are not necessarily the best varieties for the fruit-grower. The nurseryman's ideal of a variety is one which is a good grower when young, but many of the poorer growers are the best bearers and often give the most profitable fruit. Every one is ready to admit, probably, that the Baldwin Apple has been planted too freely, and the Canada Red and other wayward growers too little. The trouble is that our conception and definition of a first-class tree—that is, a first-class tree in the nursery, for sale—are at variance with truth. We define a first-class tree to be one which is straight, smooth, tall and stocky, but very many good varieties will not grow that way. A truer definition would be that a first-class tree is one which is healthy and well-grown, and which has the characteristics of the variety. The speaker thought it time for the nurseryman to begin to educate the people to the necessity of choosing varieties with reference to their ultimate behavior, rather than to place so much emphasis upon the mere form or comeliness of the young tree in the nursery; but the first means of spreading this knowledge is the growing of a wider range of varieties which are adapted to particular needs and areas, for, at the present time, the buyer finds only a comparatively small list of established varieties from which to select. Some of the barrenness of orchards may be due to the want of proper selection of buds or cions when the trees are propagated. Every tree has an individuality or habit of its own, and it is not natural for some trees to bear as heavily as others. Cions tend to perpetuate these individual characteristics. He would therefore discourage the use of buds or cions taken from nursery stock, and he suggested that it might be a safe stroke of business for a nurseryman to propagate his stock from bearing trees of known history, and to let the fact be known.

N. H. Albaugh, Ohio, spoke upon Peach Culture, emphasizing the importance of good, clean, yearling stock, and careful attention to digging out the borer. A Peach-tree may be expected to give a good crop when four years planted. The Sneed is undoubtedly the earliest peach known, a conclusion which was sustained by other members. It is over a week earlier than the the Alexander or Amsden. It is thought to be an offshoot of the Chinese Cling type. Specimens from Tennessee were on exhibition. Mr. A. Willis, of Kansas, after having tried many ways of increasing his retail nursery trade, found that the most effective way is to send a live agent after orders. This conclusion seemed to meet with the approval of the association.

The officers for the ensuing year are Silas Wilson, Atlantic City, Iowa, President; George A. Sweet, Dansville, New York, Vice-President; George C. Seager, Rochester, New York, Secretary; N. A. Whitney, Franklin Grove. Illinois, Treasurer. The association meets next year in Chicago.

The Boston Rose and Strawberry Show.

ROSES in eastern Massachusetts have been unusually poor this year. The season has been a trying one to them, as it has to all sorts of hardy plants. The dry summer of 1894 was followed by a cold winter, introduced in November by an ice and wind storm of unparalleled severity that worked havoc with trees and shrubs. Great heat in the early days of May, when the thermometer recorded over ninety degrees, Fahrenheit, was followed in the same week by killing frosts, which were probably the direct cause that the flowers of hybrid Perpetual Roses were not abundant and well formed in that part of the country. The severest drought that eastern Massachusetts has felt in the month of June has not improved the Roses, and gardeners have certainly every excuse for their lack of success this year. But if the flowers were poor, there was all the more reason why they should have been tastefully and properly displayed. The Massachusetts Horticultural Society has long enjoyed the deserved reputation of keeping well up with horticultural progress, and it is a new departure for it to take a long step backward. Twenty years ago the society inaugurated in this country the system, which had previously been adopted in England and France, of requiring exhibitors of roses to arrange their flowers in boxes covered with moss, which hid the tin tubes that held the flowers, and furnished the best possible background to display the form and color of the individual blooms. This plan, which is practiced in all foreign exhibitions, made the Boston Rose shows attractive and popular, and did a great deal to stimulate the cultivation of the queen of flowers all over the United States. After a number of years some Massachusetts exhibitors objected to the cost of the boxes and the trouble of procuring the moss, and persuaded the society to assume the responsibility of supplying these adjuncts to the exhibitions. This year the committee of arrangements, finding that it required some trouble and foresight to secure a good supply of fresh moss, did away with the boxes altogether, and allowed exhibitors to show their flowers in small glass vases. Under these conditions the best roses in the world, in competition with the ordinary lots shown in Boston last week, would not have been worth looking at if these had been arranged on moss. As it was, flowers half-drooping on their stems, facing some in one direction and some in another, the small white paper labels almost indistinguishable on the white cloths of the tables, sometimes in front and sometimes behind the vases, or with no labels at all, did not make an interesting or instructive exhibition.

Among flowering plants the best and most conspicuous exhibit was a lage bank of well-flowered, healthy Orchids, principally Cattleya Mossiæ and Miltonia Phalænopsis, exhibited

by Mr. John L. Gardner, of Brookline. This group was tastefully arranged with small plants of Cocos Weddeliana and Maidenhair Ferns, and produced a really charming effect. The Botanic Garden of Harvard College exhibited a large and exceedingly interesting collection of flowers of hardy herbaceous perennials, and Miss C. N. Endicott and Miss C. E. Hewitt showed 109 species of wild native plants in flower, including a number of alpine species from the White Mountains, not often seen on exhibition tables or by the dwellers in cities.

Strawberries generally showed the effects of the severe winter and May frosts. Mr. J. S. Fay, however, whose Roses were by far the best in the exhibition, as they have been now for several years, sent from his wonderfully productive garden at Wood's Holl, on Cape Cod, a basket of Marshall berries that in size and color were as remarkable as any strawberries we have ever seen.

Notes.

Coreopsis grandiflora has become one of the most popular of the yellow summer flowers, and large masses of them are now among the most conspicuous features of the florists' windows.

Owing to the abundance and good quality of tomatoes now arriving from the south and other points near by, those grown in hot-houses command only fifteen cents a pound at retail. New artichokes are coming in from southern France. Nearly all the staple vegetables are now coming from Long Island gardens.

Exhibits of wild flowers have made conspicuous features at several of the Rose shows lately held in Oregon. In Portland, the abundance and beauty of these exhibits of native flowers are said to have surprised the visitors by their attractiveness, and at Salem there were nearly five hundred collections on exhibition, one exhibitor, Miss Catharine Beckner, showing ninety-five varieties.

The Swamp Magnolia, or, as it is sometimes called, the Laurel Magnolia, is now flowering in Central Park, and the beauty and fragrance of its globular white flowers, set in the thick, deep green foliage, attract a good deal of attention. After the flowers fall the conical fruits, which are green first, soon become rosy-pink, and as the carpels split open they show coral-red, berry-like seeds. The leaves hold on late in the autumn, so that it is among the most attractive of our smaller native trees all the year through.

In a bulletin prepared by Mr. U. P. Hedrick, of the Michigan Experiment Station, it is stated that there are over a hundred and fifty named varieties of native Plums scattered throughout the country, and experimenters are annually introducing new seedlings. These have been classified into groups, and lines with some accuracy have been drawn about them, but the intermediate forms have become so numerous, owing to natural crosses, that it is difficult to make any classification. The fruit of some of these varieties comes into market three weeks before those of the European varieties. The trees are not particular as to soil, and large growers who want a variety of fruits, and the general farmer who likes trees which are free from diseases and from insects, will make no mistake in planting such varieties as Wild Goose, De Soto, Miner, Rollingstone, Weaver and Newman. To our own taste there is a sprightly flavor about some of these wild plums which is not to be despised even when compared with the more refined, but somewhat characterless, taste of the best European and Japanese varieties.

The June number of *The Forum* contains an interesting article by Mr. E. V. Smalley on the Future of the Arid West. In speaking of the enormous area between the Rockies and the Sierra, he says that we ought to give over deluding ourselves with the idea that this vast vacant expanse is to be the reserve land for future generations to fill up, just as the fertile plains east of the Mississippi have been filled. In the narrow bottom-lands where there are running streams, which make irrigation possible, strips of land can be reclaimed which will yield an immense quantity of forage, grain and fruit, and ultimately these valleys may present the appearance of continuous towns from one end of the canals to the other, while the facilities for social intercourse, education and interchange of thought will develop in these dense settlements a high grade of rural civilization. But we must not lose sight of the fact that these will always be separated by broad areas of irreclaimable lands, which will be useful, at the best, for pasturage, and in some regions will remain an absolute desert. In order to show the proportion of reclaimable land to the entire area Mr. Smalley makes the following striking comparison: A single furrow run across a twenty-acre field will represent all the area that can ever, by the largest enterprise and most liberal expenditure, be rescued for cultivation in this arid region. The remainder of the field will represent the area that will always remain in its present condition, the realm of romance and adventure and hardihood, from which the cowboy, the hunter, the prospecter and the pack-train will not soon disappear.

Some years ago the Federal Government expended $60,000 in planting Beach Grass along the ocean side of the tip of Cape Cod, in an effort to prevent that drifting inward of the beach sands which threaten Provincetown with entire destruction. But the work was undertaken upon too small a scale, and the inhabitants of the town did not realize that the growth of the grass would have to be fostered, so that most of it has perished and the advance of the sand drifts continues. The state of Massachusetts has, however, now taken the matter in hand, through its Harbor and Land Commission, and Mr. Leonard W. Ross, of Boston, has been retained as advisory forester. Mr. Ross proposes to adopt expedients similar to those successfully begun more than a hundred years ago to save lands on the shore of the Bay of Biscay; and expense will not be spared, for the harbor of Provincetown is the only one that affords shelter to mariners along many leagues of stormy coast. His method will be based upon that by which Nature herself once defended the point of the promontory. Her thick plantations of Beach Grass were backed by low forests of Pitch Pine, which were cut off for fuel by the early settlers. These will be renewed, and, according to the Boston *Transcript*, a nursery has been already established for the propagation of the Scotch Broom, Genista Scoparia, which, with Silver Poplars, White Willows and Locusts, and an undergrowth of smaller plants, will be used to form wind-breaks. Austrian and Scotch Pines will be tried, and also the Maritime Pine, the Alder, the European White Birch, the Hornbeam, the Cockspur Thorn and the Tamarix.

Red currants now make a pleasing show among small fruits in market, and red and blackcap raspberries, from Maryland and New Jersey, are already plentiful and cheap, though the earliest ones began to arrive only a few days ago. Blackberries and huckleberries from North Carolina cost twelve cents a quart. Green gooseberries are even cheaper, but strawberries of good quality, now that their season is nearly ended, command twenty cents a quart box. New apples, Astrachans, from Georgia, are already in market. Watermelons are abundant, one hundred and sixty-two car-loads having come here from Florida and Georgia during last week. They sell for fifty cents, while selected muskmelons bring fifteen to twenty cents each. Twenty-two car-loads of California cherries, peaches, plums, and a few pears were sold here last week. Some boxes of large Tragedy prunes were bid up to $6.00 at the wholesale auction, this being the only blue plum now offered, except the small Koning Claudie. The showy Japanese Botan plum is coming from California and from Georgia. Those from the western coast are larger, of more even size, and bring considerably higher prices. The fruit is a dark yellowish-red, with white bloom and of delicious flavor. The Royal, considered the leading apricot in California, makes up the bulk of this fruit now coming here. This old French variety, which has long been a favorite for canning and drying, is of a dull yellow color with an orange cheek faintly tinged with red. Another variety now offered is the large early Montgamet, a new kind distributed a few years ago by the California Nursery Company. This promising fruit sells for $1.00 a box more than the smaller Royal.

Hugh Francis Clarke Cleghorn, M. D., died in his home at Strabithie, in Fife, Scotland, on the 19th of May last. In 1854 he was appointed Professor of Botany in the Madras University, and was exceedingly active in laying the foundation of the Indian Forestry Service, the inception of which was due to his zeal, intelligence and executive force. Dr. Cleghorn was the first Conservator of Forests of the Madras Presidency, but left India in 1869 and returned to Scotland, where he filled for a short time the chair of Botany in the University of Glasgow. He retained his interest in botany and arboriculture until the end of his life, and was an active member of the Scottish Arboricultural Society, which he served as president for several years, and of the Edinburgh Botanical Society. In 1861 Dr. Cleghorn published in London *The Forests and Gardens of South India*, a work abounding in practical information. He was also the author of a large number of papers upon botanical and dendrological subjects and of a number of biographical sketches of famous botanists. The genus Cleghornia, of the Dogbane family, established in his honor by Wight, is now referred to Baissea.